

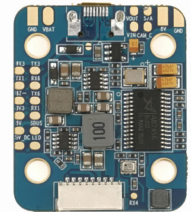
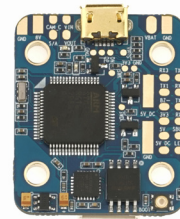
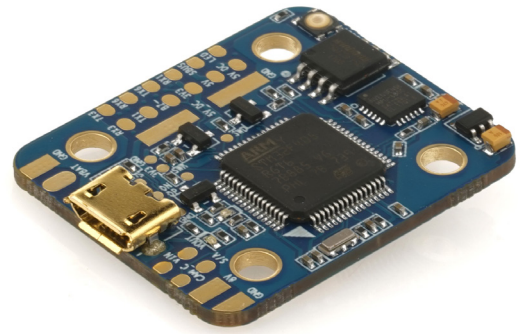
80100

OMNIBUS F4 Nano V6

F405 / 5VBEC / Camera control / 5x UART / Flash / Baro

The Omnibus F4 Nano V6 flight controller uses the MPU6000 over SPI for the stable flight performance. Also onboard are a barometer and AB7456 OSD chip for the BetaFlight integrated OSD.

Omnibus F4 Nano V6 using same target as Omnibus Fireworks supports 3-6s LIPO direct input, has 5x Hardware UARTs.



Modifications on v6:

- Tantalum Capacitors added for noiseless gyro reading
- Solder pads added for SmartAudio and Camera Control (next to Video pads)
- Added an 8v BEC and LC Filter for the camera and VTX power
- This board now has 5 UART ports
- New style layout

Features:

- STM32 F405 MCU, Runs Betaflight firmware(supported from v3.2)
- MPU6000 Over SPI Bus in damping box.
- 20x20 mm Mounting holes
- Supports Lipo direct plugin (3-6S)
- Supports 5V 1A BEC output (Buck)
- Supports 8V 1A BEC with LC filter output for the camera and VTX(Buck)
- STM32 controls OSD chip over SPI in DMA mode (Betaflight OSD)
- More caps to reduce gyro power noise.

Resources:

Function	Solder Pad Silk screen	Resources	MCU Pin	Notes
SBUS	RC	UART1	PA10	Build-in inverter
DSM2	TX1	UART1	PA9	CLI serialrx_halfduplex set to ON
Smart Audio VTX	S/A	UART2	PA2	
Smartport	TX1	Software serial	PA9	Invalid when using DSM2 RX
ESC Telemetry	RX4	UART4	PA1	
Camera Control	CAM_C		PB9	
IIC2_SDA	RX3	UART3	PB11	
IIC2_SCL	TX3	UART3	PB10	
GPS	RX6/TX6	UART6	PC7/PC6	
WS2812B LED	LED		PB6	
Buzzer	Bz-/Bz+		PB4	

Pinmap

